

Notes on some western plants.

J. N. ROSE.

(WITH PLATE X.)

Aquilegia Jonesii Parry.—This beautiful little Columbine was first collected by Capt. W. A. Jones on Phlox Mt., Wy., in 1873, and Dr. Parry tells me but a single flower was obtained. Mr. Canby collected it at the Upper Marias Pass, Rocky Mts., Montana, 1883; also in fruit at an altitude of 8,000 feet. Mr. Tweedy now gets it in great abundance in flower and fruit from mountains on East Boulder River, sub-alpine limestone slides (June, 1889), Park county, Montana.

Elatine Californica Gray.—The only published station of this species is Webber's Spring, in the Sierra valley, N. Cal. (J. G. Lemmon); also collected in Spokane county, Washington, in borders of ponds by Suksdorf (1884). Dr. H. E. Hasse has sent me specimens collected this season (1889) from a small pond near Los Angeles, and far away from the only two known stations. Dr. Hasse writes: It would be of interest to be able to account for the sudden appearance here of some of the plants sent you. In the past spring, at the grounds of the Soldiers' Home, an artificial pond was made, where no running or standing water had been, and on the margin of this pond this species with other rare ones were collected. Now, once, or several times during spring and autumn at the equinox, heavy winds, lasting a couple of days, set in, called sand-storms. These are quite severe, obscuring the air with clouds of dust and sand, and which may account for the distribution of these seeds.

Hymenatherum pentachætum DC.—At San Diego, Texas, collected by G. C. Nealley (1889). There are no specimens of this in the National Herbarium by recent collectors, but most of the older collectors got it in abundance. J. G. Lemmon's specimens, collected August, 1884, at Laguna, N. Mex., prove to be the very rare species *H. Thurberi*, only found by Wright and Thurber.

Nama stenocarpa Gray.—This species has its stamens bearing small appendages at the base. Two other species, *P. Schaffneri* and *P. stenophyllum*, are also described with appendages. Dr. Hasse sends this plant from Los Angeles county, Cal. It has only been found before in the southeastern part of the state.

Monardella macrantha Gray.—C. R. Orcutt sent two specimens from Cuyamaca Mts., Cal. (1889), with smaller heads than the type (5 to 8-flowered). Palmer collected the species in the same mountains in 1875 (294), and G. R. Vasey in the St. Lucian Mts. (487), 1880, and the var. *nana* at Julian, Cal.

Chorizanthe Vaseyi Parry & Rose n. sp. Decumbent, branching from the base, 3–6 inches broad, more or less strigose or lanate pubescent throughout: leaves all radical, spatulate tapering below to a winged petiole, lanosely pubescent beneath: involucre with narrow triangular tube slightly swollen at base, divisions 3, divergent, as long as the tube or somewhat longer, channeled and somewhat corrugated above, terminating in straight cusps, the membranous intervals with a distinct ciliate tuft: perianth partly exsert, yellow, short pedicellate with long narrow tube, segments nearly equal one-third the length of the tube, ovate acuminate: stamens as long as the perianth, anthers oblong, filaments inserted at the base: ovary smooth, broadly triangular, with long curved styles: embryo not seen.

Habitat: Lagoon Head, Lower California, no. 275, Dr. E. Palmer, March, 1889. An interesting addition to the *Euchorizanth*e section, combining some of the characteristics of *C. brevicornu* and the South American *C. commisuralis*. The specific name very properly commemorates the services of Dr. George Vasey, Botanist to the U. S. Agricultural Department, under whose auspices the recent valuable collections of Dr. Palmer have been made known to the botanical world.

EXPLANATION OF PLATE X.—*a*, the involucre; *b*, division of involucre with "ciliate tuft;" *c*, flower.

The following additional notes upon a few of the species collected by Mr. Frank Tweedy in 1888–1889 are appended. The author is grateful to W. M. Canby for assistance in the determination of species.

Astragalus platytropis Gray.—This very rare species was collected by Mr. Tweedy in Beaver Head county, Montana, July, 1888. It has not before been found in this region and is new to Coulter's Rocky Mountain Manual. It was first collected in the Sierra Nevada Mountains above Sonora Pass at 10,000 ft. (*Brewer*, 1860–1862), the only other collection being that of Sereno Watson on East Humboldt Mountains, Nevada, 6,000 ft., July, 1868. Leaflets six lines long, lanceolate and acute; pods a little over an inch long.

Astragalus reventus Gray.—Another species new to Montana and only known from Oregon and Washington. Collected by Mr. Tweedy, June, 1888, Beaver Head county, Montana.

✓ *Erigeron Tweedyana* Canby & Rose, n. sp.—Perennial, from a multicapital caudex 4 to 8 inches high, simple or somewhat branched, soft pubescent below, becoming lanate above (apparently densely white lanate when young): leaves narrowly linear, 2 to 2½ inches long, crowded at base, reduced and scattered above, somewhat pubescent: heads 3 to 5 lines high, a little broader, terminating simple stems on the branches; the peduncles long and naked or with few bract-like leaves: involucre of numerous narrow acuminate bracts, in a single rather crowded series, with tips a little spreading, densely lanate: rays numerous, conspicuous, white: pappus double, the outer multisquamellate: akenes pubescent.

Collected by Mr. Frank Tweedy, June, 1888, in Park county, Montana.

Here probably should be referred F. L. Scribner's no. 77, in part, from the Little Belt Mountains, Montana, Aug. 12, 1883, altitude 7,500 feet. The lanate pubescence of the involucre and double pappus seems to ally this species with *E. Muirii* of the far north. It is closely related to *E. pumilus*, but with larger heads, softer pubescence, etc. Its closest alliance, however, is probably with *E. Brandegei* of Colorado, but a careful comparison with specimens in the Gray Herbarium, and a good specimen communicated by Mr. Brandege, show that the two are distinct. *E. Brandegei* has smaller almost globular heads, very short almost naked bracts (even in flowers), etc. *E. Tweedyi* Canby is evidently only a large form of *E. tener* Gray.

✓ *Erigeron Parryi* Canby & Rose, n. sp. A somewhat similar species but depressed, one to two inches high, pubescence villous, spreading: heads solitary on the stems (in one case two heads), 3 lines high: rays 40 to 50, white, short and rather broad, 3-dentate at tip: involucre scales tapering to a sharp point, purplish at tip: pappus double, the outer short, the bristles as thick as those of the inner.

Dry hills, 7,000 feet altitude, on Grasshopper Creek, Beaver Head county, Montana, July, 1888 (*Frank Tweedy* 15).

Near *E. pumilus* and also near *E. radicans*, differing

from the latter in the narrow and very hirsute leaves, in the double pappus and dentate tipped rays.

Tanacetum capitatum Torr. & Gray.—This little plant, only known from the Rocky Mountains of North Wyoming and collected by Nuttall & Parry, was collected by Mr. Tweedy in June, 1888, in Beaver Head county, Montana. It grows on dry hills, 5,300 to 7,000 feet altitude. We are indebted to Mr. Canby for the determination of this rare species.

Penstemon Tweedyi Canby & Rose, n. sp. Three to six inches high, of a purplish hue, from a woody caudex, glabrous except the inflorescence, which is glandular puberulent: leaves mostly radical, 10 to 15 lines long, lanceolate, spatulate or narrower; stem leaves bract-like, one or two pairs below the flowers: flowers 3 to 8, mostly unilateral: calyx with somewhat unequal acute lobes: corolla bilabiate, purplish, 3 to 4 lines long: anthers dehiscent from base to apex through the junction of the two cells, glabrous; sterile filament glabrous.

Sub-alpine bogs, 9,500 feet altitude, Beaver Head county, Montana, June, 1888. Collected by Mr. Frank Tweedy (no. 35), a zealous collector in this region for the past eight years, and author of "Catalogue of the Plants of Yellowstone Park."

Our plant seems clearly to belong to Gray's sixth subsection of *Eupentstemon*. It resembles some simple entire forms of *P. humilis*, but differs in its glabrous sterile stamen, almost naked stem, etc.

Washington, D. C.

Dr. Charles C. Parry.

Our western flora can hardly be touched at any point without encountering the name of Parry, our oldest and most distinguished botanical explorer. Hundreds of new plants were brought to light by him, and although he has written very little his name must always be a prominent one in American botany.

He was born at Admington, Worcestershire, England, August 28, 1823, and died at Davenport, Iowa, February 20, 1890. In 1832 his family came to America and settled on a farm in Washington county, New York. He graduated at